

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: September 23, 2003, 16:12:15 ; Search time 30 seconds  
(without alignments)  
166.423 Million cell updates/sec

Title: US-09-600-787-1

Perfect score: 610  
Sequence: 1 DQPTWISGNNHYVSGSKN.....NTVGSNNHYVSGNNKVTDA 118

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 328717 seqs, 4231058 residues

Total number of hits satisfying chosen parameters: 328717

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database :  
1: /cgn2\_6/ptodata/1/iaa/5A.COMB.pep.\*  
2: /cgn2\_6/ptodata/1/iaa/5B.COMB.pep.\*  
3: /cgn2\_6/ptodata/1/iaa/5A.COMB.pep.\*  
4: /cgn2\_6/ptodata/1/iaa/5B.COMB.pep.\*  
5: /cgn2\_6/ptodata/1/iaa/PCCTS.COMB.pep.\*  
6: /cgn2\_6/ptodata/1/iaa/ackfilest.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	172	28.2	892	4 US-09-336-447A-5	Sequence 5, Appli
2	171	28.0	624	4 US-09-336-447A-7	Sequence 7, Appli
3	169.5	27.8	941	4 US-09-336-447A-9	Sequence 9, Appli
4	166	27.2	889	4 US-09-336-447A-15	Sequence 15, Appli
5	150.5	24.7	873	4 US-09-336-447A-13	Sequence 13, Appli
6	137.5	22.5	831	4 US-09-336-447A-13	Sequence 1, Appli
7	135	22.1	1284	4 US-09-437-040B-27	Sequence 27, Appli
8	123	19.6	110	2 US-08-569-166-34	Sequence 34, Appli
9	119.5	19.1	673	4 US-09-107-532A-5134	Sequence 5134, Ap
10	116.5	19.1	965	2 US-08-737-716-14	Sequence 35, Appli
11	110	18.0	616	4 US-09-206-942-35	Sequence 37, Appli
12	110	18.0	1222	4 US-09-206-942-37	Sequence 37, Appli
13	110	18.0	1228	4 US-09-206-942-34	Sequence 34, Appli
14	109	17.9	1338	2 US-08-728-470-9	Sequence 9, Appli
15	109	17.9	1338	2 US-08-719-641-9	Sequence 9, Appli
16	109	17.9	1529	2 US-08-728-470-10	Sequence 10, Appli
17	109	17.9	1529	2 US-08-719-641-10	Sequence 10, Appli
18	109	17.9	1599	2 US-08-617-697-9	Sequence 9, Appli
19	109	17.9	1600	2 US-08-617-697-10	Sequence 10, Appli
20	107	17.5	1220	4 US-09-206-942-28	Sequence 28, Appli
21	107	17.5	1226	4 US-09-206-942-26	Sequence 26, Appli
22	105.5	17.3	992	4 US-09-206-942-61	Sequence 61, Appli
23	105.5	17.3	998	4 US-09-206-942-59	Sequence 59, Appli
24	105	17.2	969	4 US-09-206-942-32	Sequence 32, Appli
25	105	17.2	975	4 US-09-206-942-30	Sequence 30, Appli
26	104.5	17.1	1833	4 US-08-621-944A-4	Sequence 4, Appli
27	104.5	17.1	1833	4 US-08-945-567D-4	Sequence 4, Appli

28	104.5	17.1	1992	4 US-08-621-944A-3	Sequence 3, Appli
29	104.5	17.1	1992	4 US-08-945-567D-3	Sequence 3, Appli
30	104.5	17.1	2123	4 US-08-968-685A-10	Sequence 10, Appli
31	103.5	17.0	1073	4 US-09-206-942-49	Sequence 49, Appli
32	103.5	17.0	1079	4 US-09-206-942-47	Sequence 47, Appli
33	103.5	17.0	2314	4 US-09-268-347-49	Sequence 49, Appli
34	103	16.9	1095	4 US-09-206-942-69	Sequence 69, Appli
35	103	16.9	1536	1 US-08-038-682-2	Sequence 2, Appli
36	103	16.9	1536	1 US-08-302-832-2	Sequence 2, Appli
37	103	16.9	1536	2 US-08-530-198-2	Sequence 2, Appli
38	103	16.9	1536	2 US-08-469-880-2	Sequence 2, Appli
39	103	16.9	1536	2 US-08-728-470-2	Sequence 2, Appli
40	103	16.9	1536	2 US-08-617-697-2	Sequence 2, Appli
41	103	16.9	1536	2 US-08-719-641-2	Sequence 2, Appli
42	103	16.9	1536	4 US-09-206-942-67	Sequence 67, Appli
43	102.5	16.8	2048	4 US-09-268-347-48	Sequence 48, Appli
44	101.5	16.6	246	3 US-09-451-117-2	Sequence 2, Appli
45	101.5	16.6	246	4 US-09-888-655-2	Sequence 2, Appli

## ALIGNMENTS

```

RESULT 1
US-09-336-447A-5
: Sequence 5, Application US/09336447A
: Patent No. 6310190
: GENERAL INFORMATION:
: APPLICANT: HANSEN, ERIC J.
: APPLICANT: ABEI, CHRISTOPH
: APPLICANT: COPE, LESLIE D.
: APPLICANT: MACIVER, ISOBEL
: APPLICANT: FISKE, MICHAEL J.
: APPLICANT: FREDENBURG, ROSS A.
: TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS
: FILE REFERENCE: AACT1024
: CURRENT APPLICATION NUMBER: US/09/336,447A
: CURRENT FILING DATE: 1999-06-21
: NUMBER OF SEQ ID NOS: 98
: SOFTWARE: Patentln Ver. 2.1
: SEQ ID NO 5
: LENGTH: 892
: TYPE: PRT
: ORGANISM: Moraxella catarrhalis
US-09-336-447A-5

Query Match      28.2%; Score 172; DB 4; Length 892;
Best Local Similarity 32.7%; Pred. No. 2.3e-08;
Matches 35; Conservative 19; Mismatches 47; Indels 6; Gaps 1;

QY      9 GSNNTVSSGSKNYLAGNDNTVYISGDNNSVSGSNNNTVYSGSNNHYVSGTNTHTVD 68
      143 GDSSTIGGGYNGATGKSTVAGGNNQATGNNSTVAGGSYNQAGSNNSTVAGGSH---- 198
      69 NNNNVSGNDNNVSGSFHYVSGGNTVSGSNNNTVSGSNNHYVSGSNNKYV 115
      199 - -NATGSGSFAGYENKANKANNMNVALGKNNITIDGPNVVALGSNNVTI 243

RESULT 2
US-09-336-447A-7
: Sequence 7, Application US/09336447A
: Patent No. 6310190
: GENERAL INFORMATION:
: APPLICANT: HANSEN, ERIC J.
: APPLICANT: ABEI, CHRISTOPH
: APPLICANT: COPE, LESLIE D.
: APPLICANT: MACIVER, ISOBEL
: APPLICANT: FISKE, MICHAEL J.
: APPLICANT: FREDENBURG, ROSS A.
: TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS
: FILE REFERENCE: AACT1024
: CURRENT APPLICATION NUMBER: US/09/336,447A

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;; CURRENT FILING DATE: 1999-06-21  
;; NUMBER OF SEQ ID NOS: 98  
;; SOFTWARE: Patent In Ver. 2.1  
;; SEQ ID NO 7  
;; LENGTH: 624  
;; TYPE: PRF  
;; ORGANISM: Moraxella catarrhalis  
US-09-336-447A-7

Query Match  
Best Local Similarity 34.7%; Pred. No. 1.8e-08;  
Matches 43; Conservative 19; Mismatches 50; Indels 12; Gaps 4;

QY 5 NTISSNNVTYSGSKNVLACNDNTYISGDNNSVSGSNNVTYSGNDVTYGSNHYVSGT-N 63  
DB 104 NNAKGEHSTIAGGSMATGRNSTYVAGGSNNQAVGTNSTYVAGGSNNQAKGANSFAAGYGN 163  
QY 64 HVTNN-----NNVSGNDNNVSGSFHTVSGGHNTY--SGSNNVTYSGSNHYVSG--SN 112  
DB 164 QANTDNVVALGNKNTINGNSAALISENTVENOKNFTILGNTTVAAGSVILGHETSG 223  
QY 113 KVVVT 116  
DB 224 KEAT 227

RESULT 3  
US-09-336-447A-9  
; Sequence 9, Application US/09336447A  
; Patent No. 6310190  
; GENERAL INFORMATION:

;; APPLICANT: HANSEN, ERIC J.  
;; APPLICANT: AEBI, CHRISTOPH  
;; APPLICANT: COPE, LESLIE D.  
;; APPLICANT: MACIVER, ISOBEL  
;; APPLICANT: FISKE, MICHAEL J.  
;; APPLICANT: FREDENBURG, ROSS A.  
;; TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS  
;; FILE REFERENCE: AMCY:024  
;; CURRENT APPLICATION NUMBER: US/09/336,447A  
;; CURRENT FILING DATE: 1999-06-21  
;; NUMBER OF SEQ ID NOS: 98  
;; SOFTWARE: Patent In Ver. 2.1  
;; SEQ ID NO 9  
;; LENGTH: 941  
;; TYPE: PRF  
;; ORGANISM: Moraxella catarrhalis  
US-09-336-447A-9

Query Match  
Best Local Similarity 35.8%; Pred. No. 4.1e-08;  
Matches 43; Conservative 18; Mismatches 50; Indels 9; Gaps 4;

QY 5 NTISSNNVTYSGSKNVLACNDNTYISGDNNSVSGSNNVTYSGNDVTYGSNHYVSGT-N 63  
DB 108 NEAIKGNSTYVGGFTNEMGEYSTVAGCANNOAKGNSTYVGGKKAIGNSTYVAGGSN 167  
QY 64 HVTNNNNVSGNDNNV--SGSF--HTVSGGHNTYV--GSNNVTYSGSNHYVSGSNKYV 115  
DB 168 NNAKGEHSTIAGGSMATGRNSTYVAGGSNNQAVGTNSTYVAGGSNNQAKGANSFAAGYGN 227

RESULT 4  
US-09-336-447A-15  
; Sequence 15, Application US/09336447A  
; Patent No. 6310190  
; GENERAL INFORMATION:

;; APPLICANT: HANSEN, ERIC J.  
;; APPLICANT: AEBI, CHRISTOPH  
;; APPLICANT: COPE, LESLIE D.  
;; APPLICANT: MACIVER, ISOBEL  
;; APPLICANT: FISKE, MICHAEL J.  
;; APPLICANT: FREDENBURG, ROSS A.

;; TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS  
;; FILE REFERENCE: AMCY:024  
;; CURRENT APPLICATION NUMBER: US/09/336,447A  
;; CURRENT FILING DATE: 1999-06-21  
;; NUMBER OF SEQ ID NOS: 98  
;; SOFTWARE: Patent In Ver. 2.1  
;; SEQ ID NO 15  
;; LENGTH: 889  
;; TYPE: PRF  
;; ORGANISM: Moraxella catarrhalis  
US-09-336-447A-15

Query Match  
Best Local Similarity 29.6%; Pred. No. 8.3e-08;  
Matches 40; Conservative 14; Mismatches 57; Indels 24; Gaps 3;

QY 5 NTISSNNVTYSGSKNVLACNDNTYISGDNNSVSGSNNVTYSGNDVTYGSNHYVSG--T 62  
DB 226 NNAKGEHSTIAGGSMATGRNSTYVAGGSNNQAVGTNSTYVAGGSNNQAKGANSFAAGYGN 285  
QY 63 HVTNNNNVSGNDNNVSGSFHTVSGGHNTY--SGSNNVTYSGSNHYVSG--SN 112  
DB 286 NEASGDRSTYVAGGDMATGRNSTYVAGGSNNQAVGTNSTYVAGGSNNQAKGANSFAAGYGN 345  
QY 101 VSGSNHYVSGSNKYV 115  
DB 346 IGENSVAGSNNVTY 360

RESULT 5  
US-09-336-447A-13  
; Sequence 13, Application US/09336447A  
; Patent No. 6310190  
; GENERAL INFORMATION:

;; APPLICANT: HANSEN, ERIC J.  
;; APPLICANT: AEBI, CHRISTOPH  
;; APPLICANT: COPE, LESLIE D.  
;; APPLICANT: MACIVER, ISOBEL  
;; APPLICANT: FISKE, MICHAEL J.  
;; APPLICANT: FREDENBURG, ROSS A.  
;; TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS  
;; FILE REFERENCE: AMCY:024  
;; CURRENT APPLICATION NUMBER: US/09/336,447A  
;; CURRENT FILING DATE: 1999-06-21  
;; NUMBER OF SEQ ID NOS: 98  
;; SOFTWARE: Patent In Ver. 2.1  
;; SEQ ID NO 13  
;; LENGTH: 873  
;; TYPE: PRF  
;; ORGANISM: Moraxella catarrhalis  
US-09-336-447A-13

Query Match  
Best Local Similarity 26.7%; Pred. No. 2.3e-06;  
Matches 40; Conservative 24; Mismatches 47; Indels 39; Gaps 5;

QY 5 NTISSNNVTYSGSKNVLACNDNTYISGDNNSVSGSNNVTYSGNDVTYGSNHYVSG--T 62  
DB 114 NEAKGEHSTIAGGSMATGRNSTYVAGGSNNQAVGTNSTYVAGGSNNQAKGANSFAAGYGN 173  
QY 63 HVTNNNNVSGNDNNVSGSF--HTVSGG----- 90  
DB 174 NNAKGEHSTIAGGSMATGRNSTYVAGGSNNQAVGTNSTYVAGGSNNQAKGANSFAAGYGN 227  
QY 91 ----HNTVSGSNNVTYSGSNHYVSGSNKYV 115  
DB 234 QANNTVVALGNKNTINGNSAALISENTVENOKNFTILGNTTVAAGSVILGHETSG 223

RESULT 6  
US-09-336-447A-1  
; Sequence 1, Application US/09336447A  
; Patent No. 6310190

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; GENERAL INFORMATION:
; APPLICANT: HANSEN, ERIC J.
; APPLICANT: AERT, CHRISTOPH
; APPLICANT: COPE, LESLIE D.
; APPLICANT: MACIVER, ISOBEL
; APPLICANT: FISKE, MICHAEL J.
; APPLICANT: FREDENBURG, ROSS A.
; TITLE OF INVENTION: USP21 ANTIGENS OF MORAXELLA CATARRHALIS
; FILE REFERENCE: AMCY:024
; CURRENT APPLICATION NUMBER: US/09/336,447A
; NUMBER OF SEQ ID NOS: 98
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 831
; TYPE: PRF
; ORGANISM: Moraxella catarrhalis
US-09-336-447A-1

Query Match      22.5%; Score 137.5; DB 4; Length 831;
Best Local Similarity 27.7%; Pred. No. 3,7e-05;
Matches 31; Conservative 21; Mismatches 59; Indels 1; Gaps 1;

QY 5 NTISGNNVTYRSGSKNYLAGNDNTYISGDNNSVSGSNNNTYVSGSNNHVSQTN 63
DB 110 NNAEGRYSTIGGSGNNENATNEYSTIVGGDDKKAATGRTYIGGGDNNRHEGISTVAGKN 169

QY 64 HTVDNNNNVSGNDNVSGSFHTVSGGHNVTYSGSNNVTYSGSNNHVSQTNV 115
DB 170 MNAITGTFAGVGNQANNAENAVAGKNIIEGNSVAIGSENVTKTEHKV 221

RESULT 7
US-09-457-040B-27
; Sequence 27, Application US/09457040B
; Patent No. 6387641
; GENERAL INFORMATION:
; APPLICANT: Vertex Pharmaceuticals Incorporated
; APPLICANT: Bellon, Steve
; TITLE OF INVENTION: Crystallized P38 Complexes
; FILE REFERENCE: VPI/98-14
; CURRENT APPLICATION NUMBER: US/09/457,040B
; CURRENT FILING DATE: 1999-12-08
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 27
; LENGTH: 1584
; TYPE: PRF
; ORGANISM: DICTY - Dictyostelium Discoideum
US-09-457-040B-27

Query Match      22.1%; Score 135; DB 4; Length 1584;
Best Local Similarity 35.5%; Pred. No. 0.00014;
Matches 39; Conservative 18; Mismatches 33; Indels 20; Gaps 5;

QY 5 NTISGNNVTYRSGSKNYLAGNDNTYISGDNNSVSGSNNNTYVSGSNNHVSQTN 64
DB 468 NNNNNNNNNNNNSNSNT---NNNNNTNTNNNSNNNN---NNNNNSNSNN---SNNNN 519

QY 65 ITVDNNNNVSGNDNV-----SGSFHTVSGGHNVTYSGSNNHVSQTN 104
DB 520 I---NNNNNNNNNNNTIYIKRPSIGSTDESGTSLGNNSSGNNSSSGS 567

RESULT 8
US-08-569-166-34
; Sequence 34, Application US/08569166
; Patent No. 5830722
; GENERAL INFORMATION:
; APPLICANT: NICOLAS, LUC
; APPLICANT: CHARLES, JEAN-FRANCOIS
; APPLICANT: DELCLOUSE, ARMELE
; APPLICANT: BARLOY, FREDERIQUE
```

```
; TITLE OF INVENTION: CLOSTRIDIUM BIFERMENTANS DNA FRAGMENT
; TITLE OF INVENTION: BEARING GENES CODING FOR PROTEINS LINKED TO AN
; TITLE OF INVENTION: INSECTICIDAL ACTIVITY
; NUMBER OF SEQUENCES: 35
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, WAIER & NEUSTADT,
; ADDRESS: P.C.
; STREET: 1755 S. JEFFERSON DAVIS HIGHWAY, SUITE 400
; CITY: ARLINGTON
; STATE: VA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/569,166
; FILING DATE: 05-JUL-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/FR94/00768
; FILING DATE: 24-JUN-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: FR 93/07795
; FILING DATE: 25-JUN-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORMAN F.
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 660-106-0 PCT
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-413-3000
; TELEFAX: 703-413-2220
; INFORMATION FOR SEQ ID NO: 34:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 110 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-569-166-34

Query Match      20.2%; Score 123; DB 2; Length 110;
Best Local Similarity 30.9%; Pred. No. 7.1e-05;
Matches 34; Conservative 23; Mismatches 43; Indels 10; Gaps 3;

QY 5 NTISGNNVTYRSGSKNYLAGNDNTYISGDNNSVSGSNNNTY---VSGNDNTYVSGNNHVSQ 61
DB 2 NNNNNNNNT-----NNNTNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN 55

QY 62 THTVDNNNNVSGNDNVSGSFHTVSGGHNVTYSGSNNHVSQTN 110
DB 56 NNNNNNNNNNNNTTGAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 105

RESULT 9
US-09-107-532A-5134
; Sequence 5134, Application US/09107532A
; Patent No. 6583275
; GENERAL INFORMATION:
; APPLICANT: Lynn A Doucette-Stamm and David Bush
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
; ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
; NUMBER OF SEQUENCES: 7310
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: GENOM THERAPEUTICS CORPORATION
; STREET: 100 Beaver Street
; CITY: Waltham
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02354
; COMPUTER READABLE FORM:
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Microsoft word
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/737,716
FILING DATE: 22-APR-1997
CLASSIFICATION: 435
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: PCT/NL95/00170
FILING DATE: 12-MAY-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: EP 94201353.3
FILING DATE: 12-MAY-1994
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 666 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: Enterococcus hirae
IMMEDIATE SOURCE:
CLONE: Fig.5a (E. hirae)

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```

      1  Best Local Similarity 28.9%: Pred. No. 0.024;
      2  Matches 37; Conservative 20; Mismatches 53; Indels 18; Gaps 5
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      4  QY 2 EDPNTIGSSNNVYSGSKNVLAGNDFTVIGSDNNSVSGSNNVYSG--NDNTVYGSNHY 58
      5      | : : : | : : : | : : : | : : : | : : : | : : : | : : : | : : : |
      6  Db 711 ENNTKAGTITNATGTSVEYTAKTGD--IKGIEISGNVNIITASGDLINATNGVNT 768
      7
      8  QY 59 VSGTSHHYI-----PDNNNNVSGNDNNVYSGSFHTVYSGGHNNTVYSGSNHY 108
      9      | : : : | : : : | : : : | : : : | : : : | : : : | : : : | : : : |
      10 Db 769 VAAAGVATTTKSGTINATIGTANITTKIGEINGEVYSASGVN-ITASGNTLVSN-I 825
      11
      12 QY 109 SSGSKNVY 116
      13      | : : : | : : : | : : : | : : : | : : : | : : : | : : : | : : : |
      14 Db 826 TGGQVTVY 833
      15
      16 RESULT 14
      17 US-08-728-470-9
      18 , Sequence 9, Application US/08728470
      19 , Patent No. 5928651
      20 , GENERAL INFORMATION:
      21 , APPLICANT: Barenkamp, Stephen J
      22 , TITLE OF INVENTION: High Molecular Weight Surface Proteins
      23 , TITLE OF INVENTION: Of No. 5928651-Typeable Haemophilus
      24 , NUMBER OF SEQUENCES: 10
      25 , CORRESPONDENCE ADDRESS:
      26 , ADDRESSER: Shoemaker and Mattare, Ltd.
      27 , STREET: 2001 Jefferson Davis Hwy., 1203 Crystal Plaza
      28 , STREET: Bldg. 1
      29 , CITY: Arlington
      30 , STATE: Virginia
      31 , COUNTRY: U.S.A.
      32 , ZIP: 22202-0286
      33 , COMPUTER READABLE FORM:
      34 , MEDIUM TYPE: Floppy disk
      35 , COMPUTER: IBM PC compatible
      36 , OPERATING SYSTEM: PC-DOS/MS-DOS
      37 , SOFTWARE: Patentin Release #1.0, Version #1.30
      38 , CURRENT APPLICATION DATA:
      39 , APPLICATION NUMBER: US/08/728,470
      40 , FILING DATE:
      41 , CLASSIFICATION: 424
      42 , PRIOR APPLICATION DATA:
      43 , APPLICATION NUMBER: US 08/302,832
      44 , FILING DATE: 16-MAR-1993
      45 , PRIOR APPLICATION DATA:
      46 , APPLICATION NUMBER: US PCT/US93/02166
      47 , FILING DATE: 16-MAR-1993
      48 , PRIOR APPLICATION DATA:
      49 , APPLICATION NUMBER: GB 9205704.1
      50 , FILING DATE: 16-MAR-1992
      51 , ATTORNEY/AGENT INFORMATION:
      52 , NAME: Berkstresser, Jerry W
      53 , REGISTRATION NUMBER: 22,651
      54 , REFERENCE/DOCKET NUMBER: 1038-633
      55 , TELECOMMUNICATION INFORMATION:
      56 , TELEPHONE: (703) 415-0810
      57 , TELEFAX: (703) 415-0813
      58 , INFORMATION FOR SEQ ID NO: 9:
      59 , SEQUENCE CHARACTERISTICS:
      60 , LENGTH: 1338 amino acids
      61 , TYPE: amino acid
      62 , STRANDEDNESS: single
      63 , TOPOLOGY: linear
      64 US-08-728-470-9
      65
      66 Query Match 17.9%; Score 109; DB 2; Length 1338;
      67 Best Local Similarity 26.8%; Pred. No. 0.033;
      68 Matches 30; Conservative 24; Mismatches 46; Indels 12; Gaps 5
      69
      70 QY 8 SSGSNVYSGSKNVLAGNDFTVIGSDNNSVSG--SNTVYSGNDNTVYSGSNHYSGSNH 64
      71      | : : : | : : : | : : : | : : : | : : : | : : : | : : : | : : : |
      72 Db 861 AAGNVTTKSGT-TNATATGSEVETKNGSTIKGNTISQNTVATATNLTETNAVINTSS 939

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OY 65 IYTDNNNNVSGNDNNVSGSFHTVSGGHNVTGSGNNVTGSGNNHVTGSGNNKVT 116  
Db 940 TV-----NISTKTGIDINGIESTSGNVN-ITASGNTLKVSN--ITGQDVTV 983

## RESULT 15

US-08-719-641-9  
; Sequence 9, Application US/08719641  
; Patent No. 6218141  
; GENERAL INFORMATION:  
; APPLICANT: Barenkamp, Stephen J  
; TITLE OF INVENTION: High Molecular Weight Surface Proteins  
; TITLE OF INVENTION: of No. 6218141-Typeable Haemophilus  
; NUMBER OF SEQUENCES: 10  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Shoemaker and Maltare, Ltd.  
; STREET: 2001 Jefferson Davis Hwy., 1203 Crystal Plaza  
; CITY: Arlington  
; STATE: Virginia  
; COUNTRY: U.S.A.  
; ZIP: 22202-0286  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/719,641  
; FILING DATE:  
; CLASSIFICATION: 530  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/302,832  
; FILING DATE: 16-SEP-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US PCT/US93/02166  
; FILING DATE: 16-MAR-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: GB 9205704.1  
; FILING DATE: 16-MAR-1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Berkstresser, Jerry W  
; REGISTRATION NUMBER: 22,651  
; REFERENCE/DOCKET NUMBER: 1038-625  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (703) 415-0810  
; TELEFAX: (703) 415-0813  
; INFORMATION FOR SEQ ID NO: 9:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 1338 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; US-08-719-641-9

Query Match 17.9%; Score 109; DB 3; Length 1338;

Best Local Similarity 26.8%; Pred. No. 0.033;  
Matches 30; Conservative 24; Mismatches 46; Indels 12; Gaps 5;

OY 8 SGNNTVSGSKNVLGNDVTYISGDNNSVSG---SNNTVSGNDVTYGSNNHVTGSGT 64  
Db 881 AAGNTVTEGRT-TLNATGSEVETANONGTIGNITSGNTVATENTLVTTENAVTNATSG 939  
OY 65 IYTDNNNNVSGNDNNVSGSFHTVSGGHNVTGSGNNVTGSGNNHVTGSGNNKVT 116  
Db 940 TV-----NISTKTGIDIKIGIESTSGNVN-ITASGNTLKVSN--ITGQDVTV 983

Search completed: September 23, 2003, 16:38:11  
Job time : 31 secs



RESULT 2  
 US-09-952-267-7  
 ; Sequence 7, Application US/09952267  
 ; Publication No. US20030032772A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: HANSEN, ERIC J.  
 ; APPLICANT: AEBI, CHRISTOPH  
 ; APPLICANT: COPE, LESLIE D.  
 ; APPLICANT: MACIVER, ISOBEL  
 ; APPLICANT: FISKE, MICHAEL J.  
 ; APPLICANT: FREDENBURG, ROSS A.  
 ; TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS  
 ; FILE REFERENCE: AMCY:024  
 ; CURRENT APPLICATION NUMBER: US/09/952,267  
 ; CURRENT FILING DATE: 2001-09-12  
 ; PRIOR APPLICATION NUMBER: 09/336,447  
 ; PRIOR FILING DATE: 1999-06-21  
 ; NUMBER OF SEQ ID NOS: 98  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 7  
 ; LENGTH: 624  
 ; TYPE: PRT  
 ; ORGANISM: Moraxella catarrhalis  
 US-09-952-267-7

Query Match 28.0%; Score 171; DB 11; Length 624;  
 Best Local Similarity 34.7%; Pred. No. 1,1e-08;  
 Matches 43; Conservative 19; Mismatches 50; Indels 12; Gaps 4;

QY 5 NTISGNNVTVRSGSKNYLAGNDNTVTSIGDNNVSGSNNVTGSGNDNTVTSNHHVYSGT-N 63  
 DB 104 NQAKGEHSTIAGSGNQTATGRNSTVAGSNNQAVETNSTVAGSNNQAKGANSFAGVGN 163  
 QY 64 HVTYDN-----NNVSGNDNNVSGSFHTVSGHNTV--SGSNNVTGSGNNHVSQ--SN 112  
 DB 164 QANTDNAAVALGKNTTNGNSAIGSENTVNEKQNTVTLISMTTAAQSGVTLGHEHSG 223  
 QY 113 KYVT 116  
 DB 224 KEAT 227

RESULT 3  
 US-09-952-267-9  
 ; Sequence 9, Application US/09952267  
 ; Publication No. US20030032772A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: HANSEN, ERIC J.  
 ; APPLICANT: AEBI, CHRISTOPH  
 ; APPLICANT: COPE, LESLIE D.  
 ; APPLICANT: MACIVER, ISOBEL  
 ; APPLICANT: FISKE, MICHAEL J.  
 ; APPLICANT: FREDENBURG, ROSS A.  
 ; TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS  
 ; FILE REFERENCE: AMCY:024  
 ; CURRENT APPLICATION NUMBER: US/09/952,267  
 ; CURRENT FILING DATE: 2001-09-12  
 ; PRIOR APPLICATION NUMBER: 09/336,447  
 ; PRIOR FILING DATE: 1999-06-21  
 ; NUMBER OF SEQ ID NOS: 98  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 9  
 ; LENGTH: 941  
 ; TYPE: PRT  
 ; ORGANISM: Moraxella catarrhalis  
 US-09-952-267-9

Query Match 27.8%; Score 169.5; DB 11; Length 941;  
 Best Local Similarity 35.8%; Pred. No. 2.5e-08;  
 Matches 43; Conservative 16; Mismatches 50; Indels 9; Gaps 4;  
 QY 5 NTISGNNVTVRSGSKNYLAGNDNTVTSIGDNNVSGSNNVTGSGNDNTVTSNHHVYSGT-N 63  
 DB 104 NQAKGEHSTIAGSGNQTATGRNSTVAGSNNQAVETNSTVAGSNNQAKGANSFAGVGN 163

DB 108 NEATKNSYVGGFTNEAMGEYTVAGCANNOAKGNTVYGGNGKALGNNTVYGGSN 167  
 QY 64 HVTYDNNNVSGDNNVY---SGSF---HTVSGHNTV--GSNNVTGSGNNHVSQSKVY 115  
 DB 168 NQAKGEHSTIAGSGNQTATGRNSTVAGSNNQAVETNSTVAGSNNQAKGANSFAGVGN 227

RESULT 4  
 US-09-952-267-15  
 ; Sequence 15, Application US/09952267  
 ; Publication No. US20030032772A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: HANSEN, ERIC J.  
 ; APPLICANT: AEBI, CHRISTOPH  
 ; APPLICANT: COPE, LESLIE D.  
 ; APPLICANT: MACIVER, ISOBEL  
 ; APPLICANT: FISKE, MICHAEL J.  
 ; APPLICANT: FREDENBURG, ROSS A.  
 ; TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS  
 ; FILE REFERENCE: AMCY:024  
 ; CURRENT APPLICATION NUMBER: US/09/952,267  
 ; CURRENT FILING DATE: 2001-09-12  
 ; PRIOR APPLICATION NUMBER: 09/336,447  
 ; PRIOR FILING DATE: 1999-06-21  
 ; NUMBER OF SEQ ID NOS: 98  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 15  
 ; LENGTH: 889  
 ; TYPE: PRT  
 ; ORGANISM: Moraxella catarrhalis  
 US-09-952-267-15

Query Match 27.2%; Score 166; DB 11; Length 889;  
 Best Local Similarity 29.6%; Pred. No. 5.1e-08;  
 Matches 40; Conservative 14; Mismatches 57; Indels 24; Gaps 3;

QY 5 NTISGNNVTVRSGSKNYLAGNDNTVTSIGDNNVSGSNNVTGSGNDNTVTSNHHVYSGT-T 62  
 DB 226 NTAEGSSAIGGEPFNALGNNTISGRONASGDSSTVAGSEQOALGKSTISGGRQ 285  
 QY 63 NHTYDNNNVSGDNNVSGSFHTVSGH-----NTVS-GSNNVT 100  
 DB 286 NEASGDRSTVAGGQNOALGKSTVSGYRQATGKGSEFAGIDNKANDNNDVVALGNKNT 345  
 QY 101 VSGSNHVSQSKVY 115  
 DB 346 IEGNSVAIGSNTV 360

RESULT 5  
 US-09-952-267-13  
 ; Sequence 13, Application US/09952267  
 ; Publication No. US20030032772A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: HANSEN, ERIC J.  
 ; APPLICANT: AEBI, CHRISTOPH  
 ; APPLICANT: COPE, LESLIE D.  
 ; APPLICANT: MACIVER, ISOBEL  
 ; APPLICANT: FISKE, MICHAEL J.  
 ; APPLICANT: FREDENBURG, ROSS A.  
 ; TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS  
 ; FILE REFERENCE: AMCY:024  
 ; CURRENT APPLICATION NUMBER: US/09/952,267  
 ; CURRENT FILING DATE: 2001-09-12  
 ; PRIOR APPLICATION NUMBER: 09/336,447  
 ; PRIOR FILING DATE: 1999-06-21  
 ; NUMBER OF SEQ ID NOS: 98  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 13  
 ; LENGTH: 873  
 ; TYPE: PRT  
 ; ORGANISM: Moraxella catarrhalis  
 US-09-952-267-13



Matches	31; Conservative	21; Mismatches	59; Indels	1; Gaps
Qy	5	NTISGSNTYVSGKNTLAANDWTYISGDSNVSGSNNTVYVSGDNTVYGS-NHYVSGTN	63	
Db	110	NKAAGKSTYISGGSNNKATREYESTYVGGDKATGKSTYISGGDNTREBESEYVAGSKN	169	
Qy	64	HYTDNNNNVSGDNNNTVSGSEFTVSGGKNTYVSGSNNTVYVSGSNHYVSSKNV	115	
Db	170	NQAGTGSFPAAGVEQNAENAVYGGKNTLIEGSSNVAAGSENNYKTEKHNV	221	

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Q7      1  DEQNTITSSNNYVRSQSKTYLALGNDNTVYISGNNSSVSSNNITVSGSNDNTVTSGLNHYVS 60
Db      243  DNGNCDNCSNNDNDNGANGNGANGNGANGNGTGNKNN-----GDNGNNGNNGNNGNNGNNGN 258
Q7      61  GTNETHYTDNNNNNSGQDNNVSGSFHTVSGGH-NTVSGSNNTVSGSHRTVSGSN 112
Db      299  GANNNGNNGNNDNDNGNNDNNNGNNGNNGNNGNNGNNGNNGNNGNNGNNGNNGNNGN 351
Matches 32;  Conservative % 21;  Mismatches 55;  Indels 5;  Gaps 2

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, RESULT 9
, US-10-193-764-35
, Sequence 35, Application US/10/93764
, Publication No. US2003013963A1
, GENERAL INFORMATION:
, APPLICANT: Loosmore, Sheena M.
, APPLICANT: Yang, Yan-Ping
, APPLICANT: Klein, Michel H.
, TITLE OF INVENTION: PROTECTIVE RECOMBINANT HAEMOPHILUS INFLUENZAE HIGH
, TITLE OF INVENTION: MOLECULAR WEIGHT PROTEINS
, FILE REFERENCE: 1038-1239MIS
, CURRENT APPLICATION NUMBER: US/10/193,764
, CURRENT FILING DATE: 2002-07-12
, PRIOR APPLICATION NUMBER: 09/167,568
, PRIOR FILING DATE: 1998-10-07
, NUMBER OF SEQ ID NOS: 91
, SOFTWARE: PatentIn Ver. 2.1
, SEQ ID NO 35

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; LENGTH: 915
; TYPE: PR
; ORGANISM: Haemophilus influenzae
US-10-193-764-35

Query Match
  Best Local Similarity 28.9%; Pred. No. 0.014; Length 915;
  Matches 37; Conservative 20; Mismatches 53; Indels 18; Gaps 5;

QY 2 EOPNTISGSNNVTYRSGSKNYLAGNDNTYISGDNNSVSGSNNVTYVSG---NDNTYGSNHV 58
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 398 EAVTTKAGTTTNAATGTSVEYTKTGD--IKGIESNSGNNVTITASGDTLNVSNITGQNTV 455
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY 59 VSGTNIHY-----TDNNNNVSGDNNVSGSFHTVSGGHNVTYVSGSNNVTYVSGSNHY 108
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 763 VAAAGAVTTTKGSTINATGNNANITTKGEINGEVYASAGNVN--ITASGNTLVNSN--I 819
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY 109 SGSNNVTY 116
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 820 TQGNVTYV 827

RESULT 10
US-10-193-764-37
; Sequence 37, Application US/10193764
; Publication No. US20030133943A1
; GENERAL INFORMATION:
; APPLICANT: Loosmore, Sheena M.
; APPLICANT: Yang, Yan-Ping
; APPLICANT: Klein, Michel H.
; TITLE OF INVENTION: PROTECTIVE RECOMBINANT HAEMOPHILUS INFLUENZAE HIGH
; FILE REFERENCE: 1038-1239MIS
; CURRENT APPLICATION NUMBER: US/10/193,764
; PRIOR FILING DATE: 2002-07-12
; PRIOR APPLICATION NUMBER: 09/167,568
; PRIOR FILING DATE: 1998-10-07
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: Patentln Ver. 2.1
; SEQ ID NO 37
; LENGTH: 1222
; TYPE: PR
; ORGANISM: Haemophilus influenzae
US-10-193-764-37

Query Match
  Best Local Similarity 28.9%; Pred. No. 0.02; Length 1222;
  Matches 37; Conservative 20; Mismatches 53; Indels 18; Gaps 5;

QY 2 EOPNTISGSNNVTYRSGSKNYLAGNDNTYISGDNNSVSGSNNVTYVSG---NDNTYGSNHV 58
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 705 EAVTTKAGTTTNAATGTSVEYTKTGD--IKGIESNSGNNVTITASGDTLNVSNITGQNTV 762
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY 59 VSGTNIHY-----TDNNNNVSGDNNVSGSFHTVSGGHNVTYVSGSNNVTYVSGSNHY 108
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 763 VAAAGAVTTTKGSTINATGNNANITTKGEINGEVYASAGNVN--ITASGNTLVNSN--I 819
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY 109 SGSNNVTY 116
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 820 TQGNVTYV 827

RESULT 11
US-10-193-764-34
; Sequence 34, Application US/10193764
; Publication No. US20030133943A1
; GENERAL INFORMATION:
; APPLICANT: Loosmore, Sheena M.
; APPLICANT: Yang, Yan-Ping
; APPLICANT: Klein, Michel H.
; TITLE OF INVENTION: PROTECTIVE RECOMBINANT HAEMOPHILUS INFLUENZAE HIGH
; FILE REFERENCE: 1038-1239MIS
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; CURRENT APPLICATION NUMBER: US/10/193,764
; CURRENT FILING DATE: 2002-07-12
; PRIOR APPLICATION NUMBER: 09/167,568
; PRIOR FILING DATE: 1998-10-07
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: Patentln Ver. 2.1
; SEQ ID NO 34
; LENGTH: 1228
; TYPE: PR
; ORGANISM: Haemophilus influenzae
US-10-193-764-34

Query Match
  Best Local Similarity 28.9%; Pred. No. 0.02; Length 1228;
  Matches 37; Conservative 20; Mismatches 53; Indels 18; Gaps 5;

QY 2 EOPNTISGSNNVTYRSGSKNYLAGNDNTYISGDNNSVSGSNNVTYVSG---NDNTYGSNHV 58
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 711 EAVTTKAGTTTNAATGTSVEYTKTGD--IKGIESNSGNNVTITASGDTLNVSNITGQNTV 768
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY 59 VSGTNIHY-----TDNNNNVSGDNNVSGSFHTVSGGHNVTYVSGSNNVTYVSGSNHY 108
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 769 VAAAGAVTTTKGSTINATGNNANITTKGEINGEVYASAGNVN--ITASGNTLVNSN--I 825
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY 109 SGSNNVTY 116
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 826 TQGNVTYV 833

RESULT 12
US-10-086-510-4
; Sequence 4, Application US/10086510
; Publication No. US20030027258A1
; GENERAL INFORMATION:
; APPLICANT: Fang-Tseh (Frank) CHANG et al.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR PEARL
; FILE REFERENCE: 505493000120
; CURRENT APPLICATION NUMBER: US/10/086,510
; CURRENT FILING DATE: 2002-02-27
; PRIOR APPLICATION NUMBER: 60/310,070
; PRIOR FILING DATE: 2001-08-02
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 611
; TYPE: PR
; ORGANISM: Pinctada margaritifera
US-10-086-510-4

Query Match
  Best Local Similarity 30.3%; Pred. No. 0.0098; Length 611;
  Matches 33; Conservative 21; Mismatches 48; Indels 7; Gaps 3;

QY 5 NTISSNNVTYRSGSKNYLAGNDNTYISGDNNSVSGSNNVTYVSGDNTYVSGSNHYVSGTNIH 64
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 295 NGYNNNGNNGNNGDNGNNGNNGNNGNNGNNGNNGNNGNNGNNGNNGNNGNNGNNGNNG 354
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY 65 IYTDNNNNVSGDNNVSGSFHTVSGGHNVTYVSGSN--NTVSGSNHYVSGSN 112
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 355 NNGNGNNGNNGNNGNNGNNGNNGNNGNNGNNGNNGNNGNNGNNGNNGNNGNNGNNG 397
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

RESULT 13
US-10-092-880-9
; Sequence 9, Application US/10092880
; Publication No. US20020164354A1
; GENERAL INFORMATION:
; APPLICANT: Barenkamp, Stephen J.
; TITLE OF INVENTION: HIGH MOLECULAR WEIGHT SURFACE PROTEINS OF NON-TYPEABLE
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/092,880
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/ APPLICATION: Rank, David R.
; APPLICANT: Rank, David R.

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[illegible]

Tue Sep 23 17:15:27 2003

us-09-600-787-1.rapb

Page 6

Db 63 LSPALRSLSGAGRSLSGTGRSLSGAGRSLSGTGRCLSGAGRSLSGTGRSLSGA 115

Search completed: September 23, 2003, 16:38:44  
Job time : 28 secs

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: September 23, 2003, 16:12:16 ; Search time 407 Seconds

(without alignments)  
263,803 Million cell updates/sec

Title: US-09-600-787-1

Perfect score: 1 DEOPTNIGSNMTYVSGSKN.....NTVSGSHVYSGSKKYVTD 118

Sequence:

Scoring table:

Gapop 10.0 , Gapext 0.5

Searched: 5728757 seqs, 909918778 residues

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

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3: /cgn2\_6/ptodata/1/paa/US07\_COMB.pep:\*  
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28: /cgn2\_6/ptodata/1/paa/US102\_COMB.pep:\*  
29: /cgn2\_6/ptodata/1/paa/US103\_COMB.pep:\*  
30: /cgn2\_6/ptodata/1/paa/US104\_COMB.pep:\*  
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32: /cgn2\_6/ptodata/1/paa/US106\_COMB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

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Result No.	Score	Query Match	Length	DB ID	Description
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3	610	100.0	256	32	US-60-409-557-24
4	602	98.7	262	32	US-60-409-557-23
5	530	86.9	267	32	US-60-409-557-15
6	529	86.7	269	32	US-60-409-557-16
7	509	83.4	281	32	US-60-409-557-17
8	507	83.1	277	32	US-60-409-557-18
9	502	82.3	277	32	US-60-409-557-20
10	486	79.7	280	32	US-60-409-557-18
11	476	78.0	285	32	US-60-409-557-21
12	412.5	67.6	243	32	US-60-409-557-14
13	405.5	66.5	243	32	US-60-409-557-14
14	179.5	28.4	892	28	US-10-282-1228-62892
15	172	28.2	892	25	US-09-952-267-5
16	172	28.2	892	25	US-09-952-267A-5
17	171	28.0	624	25	US-09-952-267-7
18	171	28.0	624	25	US-09-952-267A-7
19	169.5	27.8	941	25	US-09-952-267-9
20	169.5	27.8	941	25	US-09-952-267A-9
21	166	27.2	889	25	US-09-952-267-15
22	166	27.2	889	25	US-09-952-267A-15
23	155.5	25.5	867	19	US-09-380-236-2676
24	155.5	25.5	867	31	US-10-603-108-2676
25	155.5	25.5	867	32	US-60-128-476-4527
26	152.5	25.0	1099	28	US-10-282-1228-48220
27	150.5	24.7	873	25	US-09-952-267-13
28	150.5	24.7	873	25	US-09-952-267A-13
29	139.5	22.9	878	19	US-09-540-236-3401
30	139.5	22.9	878	31	US-10-603-108-3401
31	139.5	22.9	878	32	US-60-128-476-3292
32	137.5	22.5	831	25	US-09-952-267-1
33	137.5	22.5	831	25	US-09-952-267A-1
34	137	22.5	850	32	US-60-212-659-447
35	137	22.5	890	32	US-60-230-435-1702
36	136	22.3	561	32	US-60-161-932-2337
37	135.5	22.2	356	26	US-10-015-127-13064
38	135	22.1	1584	25	US-09-971-873-27
39	133	21.8	336	32	US-60-173-464-29531
40	133	21.8	337	32	US-09-614-150-39135
41	133	21.8	337	32	US-60-191-637-38761
42	133	21.8	337	32	US-60-191-681-30031
43	131	21.5	329	21	US-09-708-427-6993
44	131	21.5	331	32	US-60-167-217-6993
45	131	21.5	331	32	US-60-171-627-567

## ALIGNMENTS

RESULT 1

US-09-600-787-1

; Sequence 1, Application US/09600787

; GENERAL INFORMATION:

; APPLICANT: Jarman, Carl

; APPLICANT: Sidebottom, Christopher

; APPLICANT: Twigg, Sarah

; APPLICANT: Morrell, Dawn

; TITLE OR INVENTION: Frozen food product

; FILE REFERENCE: F/417

; CURRENT APPLICATION NUMBER: US/09/600,787

; CURRENT FILING DATE: 2002-01-17

; NUMBER OF SEQ ID NOS: 10

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 1

; LENGTH: 118

; TYPE: PRT

; ORGANISM: Lolium perenne

US-09-600-787-1

Query Match 100.0%; Score 610; DB 20; Length 118;  
Best Local Similarity 100.0%; Pred. No. 2.1e-53;  
Matches 118; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

[illegible]

```

Query Match: 100.0%; Score 610; DB 32; Length 254;
Best Local Similarity 100.0%; Pred. No. 5 2e-53;
Matches 118; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 DEQNTIGSSNNFVRSKSNVLAGNDNTVIGSDNNSVSGSNNFVVGSDNDTVTGSNNHVS 60
      |||||||
Db      137 DEQNTIGSSNNFVRSKSNVLAGNDNTVIGSDNNSVSGSNNFVVGSDNDTVTGSNNHVS 196

QY      61 GNNHIVDNNNNNSGDDNNVSGSEPTVSGGHNVSNNFVSGSHVYSGSKNYVDA 118
      |||||||
Db      197 GNNHIVDNNNNNSGDDNNVSGSEPTVSGGHNVSNNFVSGSHVYSGSKNYVDA 254

RESULT 3
US-60-409-557-24
; Sequence 24, Application US/60409557
; GENERAL INFORMATION:
; APPLICANT: Demmer, Jeroen
; APPLICANT: Shank, Michael Andrew
; TITLE OF INVENTION: Antifreeze proteins isolated from forage
; TITLE OF INVENTION: grasses and methods for their use.
; FILE REFERENCE: 11000.1070P
; CURRENT APPLICATION NUMBER: US/60/409,557
; CURRENT FILING DATE: 2002-09-09
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 256
; TYPE: PRP
; ORGANISM: Lolium perenne
US-60-409-557-24

```

Query Match:	100.0%	Score 610;	DB 32;	length 256;
Best Local Similarity	100.0%;	Pred. No. 5.3e-53;		
Matches 118;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0
QY	1	DEDPRTTSGNNVTYSGSKNYVLAGNDNTVYSGDNVSGSNNVTYSGNDNVTYTSNNYVS	60	
Db	133	DEDPRTTSGSNNVTYSGSKNYVLAGNDNTVYSGDNVSGSNNVTYSGNDNVTYTSNNYVS	198	
	61	GTNNLVTDDNNNNYSGDNNNVSGSFHTYSGGNTVYSGSNNVTYSGSNHVVYSGSKRYVDA	118	
QY	199	GTNNLVTDDNNNNYSGDNNNVSGSFHTYSGGNTVYSGSNNVTYSGSNHVVYSGSKRYVDA	256	

```

RESULT 4
US-60-409-557-23
: Sequence 23, Application US/60409557
: GENERAL INFORMATION:
: APPLICANT: Demmer, Jerroen
: APPLICANT: Shenk, Michael Andrew
: TITLE OF INVENTION: Antifreeze proteins isolated from forage
: TITLE OF INVENTION: grasses and methods for their use.
: FILE REFERENCE: 11000.1070P
: CURRENT APPLICATION NUMBER: US/60/409,557
: CURRENT FILING DATE: 2002-03-09
: NUMBER OF SEQ ID NOS: 24
: SOFTWARE: FASTSEQ for Windows Version 4.0
: SEQ ID NO 23
: LENGTH: 262
: TYPE: PRN
: ORGANISM: Festuca arundinacea
: US-60-409-557-23

```

Qy	1	DEQNTTSSGNNRYVSGSKNNTVLAAGNDNTVTYISGPDNNSVGSNNNTVYSGNDNTVTGSHNYS	60
Db	145	DEQNTTSSGNNRYVSGSKNNTVLAAGNDNTVTISGPDNNSVGSNNNTVYSGNDNTVTGSHNYS	204
Qy	61	GTNHTVTDNNNNYSGNDNNVSGSFHTYVSGGHNRYVGSNNRYVSGSNHYVSSSKNRYTDA	118
Db	205	GTNHTVTDNNNNYSGNDNNVSGSFHTYVSGGHNRYVGSNNRYVSGSNHYVSSSKNRYTDA	262

```

RESULT 5
US-60-409-557-15
: Sequence 15, Application US/60409557
: GENERAL INFORMATION:
: APPLICANT: Demmer, Jeron
: APPLICANT: Shenk, Michael Andrew
: TITLE OF INVENTION: Antifreeze proteins isolated from forage
: TITLE OF INVENTION: grasses and methods for their use.
: FILE REFERENCE: 11000.1070P
: CURRENT APPLICATION NUMBER: US/60/409,557
: CURRENT FILING DATE: 2002-09-09
: NUMBER OF SEQ ID NOS: 24
: SOFTWARE: FastSBQ for Windows Version 4.0
: SEQ ID NO 15
: LENGTH: 267
: TYPE: PRT
: ORGANISM: Lolium perenne
US-60-409-557-15

```

[illegible]

```

RESULT 6 -57-16
US-60-409-557-16
: Sequence 16, Application US/60409557
:
: GENERAL INFORMATION:
:
: APPLICANT: Demmer, Jerrold
: APPLICANT: Shenk, Michael Andrew
: TITLE OF INVENTION: Antifreeze proteins isolated from forage
: TITLE OF INVENTION: grasses and methods for their use.
: FILE REFERENCE: 11000.1070P

```

```

; CURRENT APPLICATION NUMBER: US/60/409,557
; CURRENT FILING DATE: 2002-09-09
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 269
; TYPE: PRT
; ORGANISM: Festuca arundinacea
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: (1)...(269)
; OTHER INFORMATION: Xaa = Any Amino Acid
US-60-409-557-16

```

```

Query Match      86.7%; Score 529; DB 32; Length 269;
Best Local Similarity 86.3%; Pred. No. 8.2e-45;
Matches 101; Conservative 9; Mismatches 7; Indels 0; Gaps 0;

```

```

QY 1 DEQPTISGNNVTYSGSKNTVLAGNDNTVSGDNNVSGSNNVTYSGDNTVGSNNHYVS 60
DB 152 DEQNTISGNNVSGSNNVSGNDNTVSGNNHVSNNVTYVGSNTLVGSNNHYVS 211
QY 61 GTNHIVTDNNNNVSGDNNVSGSFHTVSGGNTVSGSNNVTYSGSNNHYVSNNKVVTD 117
DB 212 GTRHIVTDNNNNVSGDNNVSGSFHTVSGGNTVSGSNNVTYSGSNNHYVSNNKVVTD 268

```

```

RESULT 7
US-60-409-557-17
; Sequence 17, Application US/60409557
; GENERAL INFORMATION:
; APPLICANT: Demmer, Jeroen
; APPLICANT: Shenk, Michael Andrew
; TITLE OF INVENTION: Antifreeze proteins isolated from forage
; FILE REFERENCE: 11000.1070P
; CURRENT APPLICATION NUMBER: US/60/409,557
; CURRENT FILING DATE: 2002-09-09
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 281
; TYPE: PRT
; ORGANISM: Lolium perenne
US-60-409-557-17

```

```

Query Match      83.4%; Score 509; DB 32; Length 281;
Best Local Similarity 81.0%; Pred. No. 9e-43;
Matches 94; Conservative 12; Mismatches 10; Indels 0; Gaps 0;

```

```

QY 1 DEQPTISGNNVTYSGSKNTVLAGNDNTVSGDNNVSGSNNVTYSGDNTVGSNNHYVS 60
DB 163 DEQNTISGNNVSGSNNVSGNDNTVSGNNHVSNNVTYVGSNTLVGSNNHYVS 222
QY 61 GTNHIVTDNNNNVSGDNNVSGSFHTVSGGNTVSGSNNVTYSGSNNHYVSNNKVVTD 116
DB 223 GTRHIVTDNNNNVSGDNNVSGSFHTVSGGNTVSGSNNVTYSGSNNHYVSNNKVVTD 278

```

```

RESULT 8
US-60-409-557-19
; Sequence 19, Application US/60409557
; GENERAL INFORMATION:
; APPLICANT: Demmer, Jeroen
; APPLICANT: Shenk, Michael Andrew
; TITLE OF INVENTION: Antifreeze proteins isolated from forage
; FILE REFERENCE: 11000.1070P
; CURRENT APPLICATION NUMBER: US/60/409,557
; CURRENT FILING DATE: 2002-09-09
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 19

```

```

; LENGTH: 277
; TYPE: PRT
; ORGANISM: Lolium perenne
US-60-409-557-19

```

```

Query Match      83.1%; Score 507; DB 32; Length 277;
Best Local Similarity 81.0%; Pred. No. 1.4e-42;
Matches 94; Conservative 12; Mismatches 10; Indels 0; Gaps 0;

```

```

QY 1 DEQPTISGNNVTYSGSKNTVLAGNDNTVSGDNNVSGSNNVTYSGDNTVGSNNHYVS 60
DB 159 DEQNTISGNNVSGSNNVSGNDNTVSGNNHVSNNVTYVGSNTLVGSNNHYVS 218
QY 61 GTNHIVTDNNNNVSGDNNVSGSFHTVSGGNTVSGSNNVTYSGSNNHYVSNNKVVTD 116
DB 219 GTRHIVTDNNNNVSGDNNVSGSFHTVSGGNTVSGSNNVTYSGSNNHYVSNNKVVTD 274

```

```

RESULT 9
US-60-409-557-18
; Sequence 18, Application US/60409557
; GENERAL INFORMATION:
; APPLICANT: Demmer, Jeroen
; APPLICANT: Shenk, Michael Andrew
; TITLE OF INVENTION: Antifreeze proteins isolated from forage
; FILE REFERENCE: 11000.1070P
; CURRENT APPLICATION NUMBER: US/60/409,557
; CURRENT FILING DATE: 2002-09-09
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 277
; TYPE: PRT
; ORGANISM: Festuca arundinacea
US-60-409-557-18

```

```

Query Match      82.3%; Score 502; DB 32; Length 277;
Best Local Similarity 81.9%; Pred. No. 4.5e-42;
Matches 95; Conservative 10; Mismatches 11; Indels 0; Gaps 0;

```

```

QY 1 DEQPTISGNNVTYSGSKNTVLAGNDNTVSGDNNVSGSNNVTYSGDNTVGSNNHYVS 60
DB 159 DEQNTISGNNVSGSNNVSGNDNTVSGNNHVSNNVTYVGSNTLVGSNNHYVS 218
QY 61 GTNHIVTDNNNNVSGDNNVSGSFHTVSGGNTVSGSNNVTYSGSNNHYVSNNKVVTD 116
DB 219 GTRHIVTDNNNNVSGDNNVSGSFHTVSGGNTVSGSNNVTYSGSNNHYVSNNKVVTD 274

```

```

RESULT 10
US-60-409-557-20
; Sequence 20, Application US/60409557
; GENERAL INFORMATION:
; APPLICANT: Demmer, Jeroen
; APPLICANT: Shenk, Michael Andrew
; TITLE OF INVENTION: Antifreeze proteins isolated from forage
; FILE REFERENCE: 11000.1070P
; CURRENT APPLICATION NUMBER: US/60/409,557
; CURRENT FILING DATE: 2002-09-09
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 20
; LENGTH: 280
; TYPE: PRT
; ORGANISM: Lolium perenne
US-60-409-557-20

```

```

Query Match      79.7%; Score 486; DB 32; Length 280;
Best Local Similarity 81.6%; Pred. No. 1.9e-40;
Matches 93; Conservative 10; Mismatches 11; Indels 0; Gaps 0;

```

[illegible]

```

RESULT 11
US-60-409-557-21
: Sequence 21, Application US/60409557
: GENERAL INFORMATION:
: APPLICANT: Demmel, Jerreen
: APPLICANT: Shear, Michael Andrew
: TITLE OF INVENTION: Antifreeze proteins isolated from forage
: TITLE OF INVENTION: grasses and methods for their use.
: FILE REFERENCE: 11000.1070P
: CURRENT APPLICATION NUMBER: US/60/409,557
: CURRENT FILING DATE: 2002-09-09
: NUMBER OF SEQ ID NOS: 24
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO 21
: LENGTH: 285
: TYPE: PRT
: ORGANISM: Festuca arundinacea
: US-60-409-557-21

```

	Query Match	78.0%;	Score 476;	DB 32;	Length 285;
	Best Local Similarity	78.9%;	Pred. No. 2e-39;		
	Matches	90;	Conservative 13;	Mismatches 11;	Indels 0; Gaps 0
QY	3	OPNTIISGNNVSSGSXKLTACNDKTYSGLDNNNSGGNNVTSGSNNDTYTSGHNVHVSST	62		
		:           :           :           :			
DQ	170	OPNTIISGTNMLVLGSKNNNVSGNDTYSSEKNNTVTSSENFIVITISSDNYLVLGSHHHVSGR	229		
		:           :           :           :			
QY	63	NHIVTDNNNNVSGENDNNVSGSFHYVSGGHNTVSGSNNVTSGSNHVHVSQSNNVT	116		
		:           :           :           :			
DQ	230	SHIVTDNNNSVSGDDNNVSGSFHRKYSGGHNTHVSGSNNVTSGSNHVHVSQSNNVT	283		
		:           :           :           :			

```

RESULT 12
US-60-409-557-14
: Sequence 14, Application US/60409557
: GENERAL INFORMATION:
: APPLICANT: Demmer, Jeroen
: APPLICANT: Shenk, Michael Andrew
: TITLE OF INVENTION: Antifreeze proteins isolated from forage
: FILE REFERENCE: 11000.1070P
: CURRENT APPLICATION NUMBER: US/60/409,557
: CURRENT FILING DATE: 2002-09-09
: NUMBER OF SEQ ID NOS: 24
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO. 14
: LENGTH: 243
: TYPE: PRT
: ORGANISM: Festuca arundinacea
: US-60-409-557-14

```

[illegible]

Db 225 IVSGSNHVYGNKVT 241

```

RESULT 13
US-60-409-557-13
? Sequence 13, Application us/60409557
? GENERAL INFORMATION:
? APPLICANT: Demmer, Teroen
? APPLICANT: Shenk, Michael Andrew
? TITLE OF INVENTION: Antifreeze proteins isolated from forage
? TITLE OF INVENTION: grasses and methods for their use.
? FILE REFERENCE: 11000.1070P
? CURRENT APPLICATION NUMBER: US/60/409,557
? CURRENT FILING DATE: 2002-09-09
? NUMBER OF SEQ ID NOS: 24
? SOFTWARE: FastSeq for Windows Version 4.0
? SEQ ID NO 13
? LENGTH: 243
? TYPE: prt
? ORGANISM: Lolium perenne
? US-60-409-557-13

```

	Query Match	66.5%	Score 405.5	DB 33	Length 243
	Best Local Similarity	61.3%	Pred. No. 2.1e-32		
Matches	84;	Conservative 12;	Mismatches 20;	Indels 21;	Gaps 1.
QY	1 DEQPNTTIGSSNNTVRSGSKNVTLAGNDNTVTSGDNNVSGSNNNTVYSGNDNTVYSGNHVYS	60			
	:                 :				
Dd	105 DEDNNTITGNTNVYRSGSNNTVYSGNDVTLSGNNNNTVSSHNHTVFYFGSDNLTISGVHYVS	164			
QY	61 GTNHTIVTDNNNNVSGANDNNVSGSFPHVYSGGHNTVSGS-----NN	99			
	: : :                 :				
Dd	165 GNHHVTVTDKNNAEASGPDHNTVSGSQNTFVSGHQIQTSSGSHSTVSGNENTVSGRNNSVYGNNN	224			
QY	100 TVSGSNHVYSGSKNYVT	116			
	:				
Dd	225 IVSGSNHVYGGNKNYVT	241			

```

RESULT 14
US-10-282-122A-62892
Sequence 62892, Application US/10282122A
GENERAL INFORMATION:
APPLICANT: Wang, Liangsu
APPLICANT: Zamudio, Carlos
APPLICANT: Malone, Cheryl
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari
APPLICANT: Zyskind, Judith
APPLICANT: Wall, Daniel
APPLICANT: Trewick, John
APPLICANT: Carr, Grant
APPLICANT: Yamamoto, Robert
APPLICANT: Forsyth, R.
APPLICANT: Xu, H.
TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
FILE REFERENCE: ELITPA.034A
CURRENT APPLICATION NUMBER: US/10/282,122A
CURRENT FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/230,335
PRIOR FILING DATE: 2000-09-06
PRIOR APPLICATION NUMBER: 60/230,347
PRIOR FILING DATE: 2000-09-09
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625

```



```

? PRIOR FILING DATE: 2000-11-27
? PRIOR APPLICATION NUMBER: 60/257,931
? PRIOR FILING DATE: 2000-12-22
? PRIOR APPLICATION NUMBER: 60/257,536
? PRIOR FILING DATE: 2001-02-09
? PRIOR APPLICATION NUMBER: 60/259,108
? PRIOR FILING DATE: 2001-02-16
? Remaining Prior Application data removed - See File Wrapper or PAM
? NUMBER OF SEQ ID NOS: 78614
? SOFTWARE: PatentIn version 3.1
? SEQ ID NO 62892
? LENGTH: 852
? TYPE: PRT
? ORGANISM: Moraxella catarrhalis
US-10-282-122A-62892

```

Query Match	29.4%;	Score 179.5;	DB 28;	Length 852;
Best Local Similarity	35.8%;	Pred. No. 6e-09;		
Matches 43;	Conservative 22;	Mismatches 46;	Indels 9;	Gaps 4;

DQ 5 NITSGSNNTYVSGSKNVLGNNTVTISGDNNYSVGSNNTVTSGNDINTVGSNRHYV - GTN 63  
 :  
 Db 100 NKAKGSSPSVAGKAKNEANGNTSVTAGGANNAKNANDPVSFVAGGRKKQAIGLNSTVAAGSD 159

DQ 64 HYYDNNANNVSGN-DNNVGSSPHYTG-----GHYTVS-GSNITYVSGSNHYSOSKNKY 115  
 :  
 Db 160 NQATGNSNVAVAGIDNPAAGTGFSPAAGKANKANNAVALNKTTIVONSVATISSNTVI 219

RESULT 15  
US-09-952-267-5

```

1  GENERAL INFORMATION:
2  APPLICANT: HANSEN, ERIC J.
3  APPLICANT: AEBI, CHRISTOPH
4  APPLICANT: COPE, LESLIE D.
5  APPLICANT: MACIVER, ISOBEL
6  APPLICANT: FISKE, MICHAEL J.
7  APPLICANT: FREDENBURG, ROSS A.
8  TITLE OF INVENTION: USPA1 ANTIGENS OF MORAXELLA CATARRHALIS
9  FILE REFERENCE: AMCY:024
10 CURRENT APPLICATION NUMBER: US/09/952,267
11 CURRENT FILING DATE: 2001-09-12
12 PRIOR APPLICATION NUMBER: 09/336,447
13 PRIOR FILING DATE: 1999-06-21
14 NUMBER OF SEQ ID NOS: 98
15 SOFTWARE: PatentIn Ver. 2.1
16 SEQ ID NO 5
17 LENGTH: 892
18 TYPE: PR1
19 ORGANISM: Moraxella catarrhalis
20 US-09-952-267-5

```

Query Match	28.2%;	Score 172;	DB 25;	Length 892;
Best Local Similarity	32.7%;	Pred. No. 3.6e-08;		
Matches	35;	Conservative	19;	Mismatches 47;
			Indels	6;
			Gaps	1

[illegible]

Search completed: September 23, 2003, 16:45:40  
Job time : 409 secs